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DUAL-IMAGING OPTICAL SYSTEM**Abstract of the Disclosure**

An optical imaging system especially for
5 microlithography includes a first imaging system forming an
intermediate image of an object, and a second imaging system
forming, on a surface, an image of the intermediate image.
A reflective surface directs light from the first imaging
system to the second imaging system. An aspherical
10 corrective optical surface is located at or near the
location of the intermediate image for correcting
aberrations such as high-order distortion, aberrations due
to accumulation of manufacturing tolerances, and spherical
aberration. The first imaging system comprises a positive
15 power refractive element and a concave mirror. The second
imaging system comprises refractive elements and no concave
mirror.